

What is claimed is:

- 1) A surgical instrument handle comprising:
 - an elongate rod having a center axis that defines mutually perpendicular axial and radial directions, the rod having a length with axially opposite proximal and distal ends; the rod distal end being adapted to be attached to a surgical instrument head;
 - a piston mounted on the rod adjacent the rod distal end for axially reciprocating movement of the piston toward and away from the rod distal end;
 - a forward grip member mounted on the rod for axial movement between first and second positions of the forward grip member relative to the rod, the forward grip member having a plurality of resilient arms that extend along the rod to distal ends of the arms that operatively engage with the piston whereby manual movement of the arm distal ends radially inwardly moves the piston axially toward the rod distal end and movement of the piston axially away from the rod distal end moves the arm distal ends radially outwardly, there being a first radial spacing between the arm distal ends when the forward grip member is in the first position relative to the rod, and there being a second radial spacing between the arm distal ends when the forward grip member is in the second position relative to the rod, the second radial spacing being larger than the first radial spacing.
- 2) A surgical instrument handle that is removably attachable to a surgical instrument head, the surgical instrument handle comprising:

a cylindrical base having a length with opposite proximal and distal ends, the base proximal end having external and internal screw threading;

an elongate rod having opposite proximal and distal ends, the
5 rod proximal end being secured to the base distal end, the rod distal end having a connector adapted for removably attaching a surgical instrument head to the connector, the connector having a center bore through the connector, and the rod distal end having a slot through the rod distal end adjacent the connector;

10 a piston received in the slot at the rod distal end for reciprocating movement of the piston in the slot, the piston having a proximal end positioned in the slot and the piston having a distal end that projects through the connector center bore;

a ring mounted on the rod for sliding movement of the ring over
15 the rod, the ring engaging with the piston proximal end;

a piston stop mounted on the rod in a position on the rod where the piston stop will engage with the ring and prevent further sliding of the ring toward the rod proximal end;

a forward grip member mounted on the base distal end for
20 limited reciprocating movement of the forward grip member on the base distal end, the forward grip member having a plurality of resilient arms that are circumferentially arranged around the rod and project from the base along the rod to distal ends of the resilient arms, the distal ends of the resilient arms engaging with the ring; and,

a rearward grip member having an interior bore with internal screw threading that mates with the external screw threading of the base, whereby turning the rearward grip member in a first direction causes the rearward grip member to move toward the rod distal end and push the forward

5 grip member to move toward the rod distal end and causes the distal ends of the forward grip member resilient arms to move over the ring and move circumferentially outwardly away from the rod, and turning the rearward grip member in a second direction causes the rearward grip member to move away from the rod distal end and allows the distal ends of the resilient arms to

10 move over the ring and move circumferentially inwardly toward the rod pushing the forward grip member to move away from the rod distal end.

3) A surgical instrument handle comprising:

an elongate rod having a center axis that defines mutually

15 perpendicular axial and radial directions, the rod having a length with axially .. opposite proximal and distal ends; the rod distal end being adapted to be attached to a surgical instrument head;

a piston mounted on the rod adjacent the rod distal end for axially reciprocating movement of the piston toward and away from the rod

20 distal end;

a forward grip member operatively connected with the rod for axial movement between first and second positions of the forward grip member relative to the rod;

a plurality of resilient arms operatively connected with the forward grip member and operatively connected with the piston whereby manual movement of the arms radially inwardly moves the piston axially toward the rod distal end, and movement of the piston axially away from the rod distal end moves the arms radially outwardly, there being a first radial spacing between the arms when the forward grip member is in the first position relative to the rod, and there being a second radial spacing between the arms when the forward grip member is in the second position relative to the rod, the second radial spacing being larger than the first radial spacing.

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4) The handle of claim 3, further comprising:

the rod distal end having a connector that attaches the rod to a surgical instrument head.

15 5) The handle of claim 4, further comprising:

the rod connector being adapted for removably attaching the surgical instrument head to the connector.

20 6) The handle of claim 4, further comprising:

the connector having a center bore through the connector; and,
the piston having opposite proximal and distal ends, the piston distal end extending through the connector center bore.

7) The handle of claim 6, further comprising:

the rod distal end having a slot adjacent the connector; and
the piston proximal end being positioned in the slot for
reciprocating movement of the piston proximal end in the slot and
reciprocating movement of the piston distal end in the connector bore.

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8) The handle of claim 3, further comprising:

a ring mounted on the rod for reciprocating movement of the ring
toward the rod proximal end and toward the rod distal end, the ring engaging
with the piston.

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9) The handle of claim 8, further comprising:

the ring having a sliding surface; and,

the plurality of resilient arms engaging with the ring sliding
surface for sliding movement of the arms on the sliding surface when the ring
moves toward the rod proximal end and when the ring moves toward the rod
distal end, the plurality of resilient arms moving between the first radial
spacing between the arms and the second radial spacing between the arms in
response to the sliding movement of the arms on the ring sliding surface.

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10) The handle of claim 8, further comprising:

the plurality of arms extending from the forward grip member
along the rod to distal ends of the arms that engage with the ring, the axial
movement of the forward grip member relative to the rod moving the distal
ends of the arms relative to the rod and the ring.

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11) The handle of claim 10, further comprising:

a rearward grip member operatively connected to the rod for movement of the rearward grip member toward the rod distal end and away from the rod distal end, the rearward grip member being operatively

5 connected with the forward grip member to cause the axial movement of the forward grip member relative to the rod in response to the movement of the rearward grip member toward the rod distal end and away from the rod distal end.

10 12) The handle of claim 3, further comprising:

the plurality of arms extending from the forward grip member along the rod to distal ends of the arms that operatively engage with the piston, the axial movement of the forward grip member relative to the rod moving the distal ends of the arms relative to the rod.

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13) The handle of claim 12, further comprising:

the plurality of arms being circumferentially arranged around the rod and the piston.

20 14) The handle of claim 12, further comprising:

a rearward grip member operatively connected to the rod for movement of the rearward grip member toward the rod distal end and away from the rod distal end, the rearward grip member being operatively connected with the forward grip member to cause the axial movement of the

forward grip member relative to the rod in response to the movement of the rearward grip member toward and away from the rod distal end.